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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/877,833	06/08/2001	An Ge	ALCA2240-1	9979
24587	7590	05/03/2005	EXAMINER	
ALCATEL USA INTELLECTUAL PROPERTY DEPARTMENT 3400 W. PLANO PARKWAY, MS LEGL2 PLANO, TX 75075			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/877,833

**Applicant(s)**

GE ET AL.

**Examiner**

Hanh Phan

**Art Unit**

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-41 and 57-61 is/are allowed.
- 6) ☒ Claim(s) 1-27, 42 and 51-56 is/are rejected.
- 7) ☒ Claim(s) 2-19 and 43-50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/15/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1, 20-27, 42 and 51-56 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-77 of copending Application No. 09/877,684 (Ge et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1, 20-27, 42 and 51-56 of the instant application are encompassed by claims 1-77 of copending Application No. 09/877,684 (Ge et al).

Regarding claims 1 and 42, Ge et al (copending Application No. 09/877,684) discloses an optical IP switching method, comprising the steps of:

receiving a plurality of optical data packets at an optical switch, wherein each data packet has a payload and header information;

Art Unit: 2633

extracting the header information from each of said plurality of data packets;  
converting the header information for each of said plurality of data packets from an optical format to an electric format;  
processing the header information for each of said plurality of data packets at a control unit to generate control signals to control data packet payload routing through the optical switch;  
routing the payload from each of said plurality of data packets through the optical switch in an all-optical manner to at least one desired switch output;  
converting the header information for each of said plurality of data packets back to an optical format; and  
recombining the payload and header information for each of said plurality of data packets for transmission on at least one output fiber from said at least one desired switch output (claim 1 of Ge et al).

Regarding claim 20, Ge et al discloses wherein said first converting step further comprises converting the header information from each of said plurality of data packets using a plurality of optical-to-electric converters (claim 45 of Ge et al).

Regarding claims 21 and 52, Ge et al discloses wherein said control unit further comprises software instructions to control functionality of said control unit (claim 40 of Ge et al).

Regarding claims 22 and 53, Ge et al discloses wherein said control unit provides a control signal based on the header information to control the routing of said plurality of data packet payloads through said optical switch (claim 40 of Ge et al).

Art Unit: 2633

Regarding claims 23 and 51, Ge et al discloses wherein said second converting step further comprises converting the extracted header information from an electric format to an optical format using a plurality of electric-to-optical converters (claim 42 of Ge et al).

Regarding claims 24 and 54, Ge et al discloses wherein said receiving step further comprises receiving a plurality of data packets at an optical switch along one or more input fibers (claim 1 of Ge et al).

Regarding claims 25 and 55, Ge et al discloses wherein said optical switch is a wave division multiplexing ("WDM") switching router and wherein said one or more input fibers and said at least one output fiber are WDM fibers (claims 1 and 2 of Ge et al).

Regarding claims 26 and 56, Ge et al discloses wherein one or more of said plurality of data packets are received at said optical switch along a common one of said one or more input fibers and transmitted from said optical switch along a plurality of different output fibers (claim 1 of Ge et al).

Regarding claim 27, Ge et al discloses said optical switch is independent of the rate of transmission of said plurality of data packets (claim 1 of Ge et al).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2633

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1, 20-27, 42 and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillemot et al (US Patent No. 5,734,486) in view of Yoo (US Patent No. 6,519,062).

Regarding claims 1 and 42, referring to Figures 1, 2 and 6-8, Guillemot discloses an optical IP switching method (Fig. 1), comprising the steps of:

receiving a plurality of optical data packets (i.e., optical data packets E1, E2,..., En, Fig. 1) at an optical switch (i.e., optical switch C, Fig. 1), wherein each data packet has a payload and header information (col. 7, lines 50-53);

extracting the header information from each of the plurality of data packets (i.e., separator means 120 extracting the header information from the data packet, Fig. 6, col. 15, lines 44-55);

converting the header information for each of the plurality of data packets from an optical format to an electric format (i.e., PIN detector 123, Fig. 6);

processing the header information for each of the plurality of data packets at a control unit (i.e., control unit 40, Fig. 1) to generate control signals to control data packet payload routing through the optical switch (col. 11, lines 35-49, col. 15, lines 44-67 and col. 16, lines 1-35);

routing the payload from each of the plurality of data packets through the optical switch in an all-optical manner to at least one desired switch output (col. 16, lines 10-34).

Guillemot differs from claims 1 and 42 in that he fails to teach converting the header information for each of the plurality of data packets back to an optical format and recombining the payload and header information for each of the plurality of data packets for transmission on at least one output fiber from the at least one desired switch output . However, Yoo in US Patent No. 6,519,062 teaches converting the header information for each of the plurality of data packets back to an optical format and recombining the payload and header information for each of the plurality of data packets for transmission on at least one output fiber from the at least one desired switch output (Fig. 21, col. 20, lines 32-50). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the converting the header information for each of the plurality of data packets back to an optical format and recombining the payload and header information for each of the plurality of data packets for transmission on at least one output fiber from the at least one desired switch output as taught by Yoo in the system of Guillemot. One of ordinary skill in the art would have been motivated to do this since Yoo suggests in column 20, lines 32-50 that using such the converting the header information for each of the plurality of data packets back to an optical format and recombining the payload and header information for each of the plurality of data packets for transmission on at least one output fiber from the at least one desired switch output have advantage of allowing providing an optical packet header processing device for processing a header of an optical packet expressing an address of a destination node to control a switching operation of an optical packet switch.

Regarding claim 20, the combination of Guillemot and Yoo teaches wherein the first converting step further comprises converting the header information from each of the plurality of data packets using a plurality of optical-to-electric converters (Fig. 6 of Guillemot and Fig. 21 of Yoo).

Regarding claims 21 and 52, the combination of Guillemot and Yoo teaches wherein the control unit further comprises software instructions to control functionality of the control unit (Fig. 6 of Guillemot and Fig. 21 of Yoo).

Regarding claims 22 and 53, the combination of Guillemot and Yoo teaches the control unit provides a control signal based on the header information to control the routing of the plurality of data packet payloads through the optical switch (col. 15 of Guillemot, lines 44-67 and col. 16, lines 1-35);

Regarding claims 23 and 51, the combination of Guillemot and Yoo teaches the second converting step further comprises converting the extracted header information from an electric format to an optical format using a plurality of electric-to-optical converters (Fig. 21 of Yoo).

Regarding claims 24 and 54, the combination of Guillemot and Yoo teaches the receiving step further comprises receiving a plurality of data packets at an optical switch along one or more input fibers (Figs. 1 and 2 of Guillemot and Fig. 21 of Yoo).

Regarding claims 25 and 55, the combination of Guillemot and Yoo teaches the optical switch is a wave division multiplexing ("WDM") switching router and wherein the one or more input fibers and the at least one output fiber are WDM fibers (Figs. 1 and 2 of Guillemot and Fig. 21 of Yoo).



Regarding claims 26 and 56, the combination of Guillemot and Yoo teaches the one or more of the plurality of data packets are received at the optical switch along a common one of the on or more input fibers and transmitted from said optical switch along a plurality of different output fibers (Figs. 1 and 2 of Guillemot and Fig. 21 of Yoo).

Regarding claim 27, the combination of Guillemot and Yoo teaches the optical switch is independent of the rate of transmission of said plurality of data packets (Figs. 1 and 2 of Guillemot and Fig. 21 of Yoo).

#### ***Allowable Subject Matter***

5. Claims 2-19 and 43-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 28-41 and 57-61 are allowed.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Takahashi (US Patent No. 5,483,370) discloses crossconnect apparatus for a coherent transmission system.

Art Unit: 2633

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**